

Activity 6

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astor@REAPER: ~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker network ls
NETWORK ID          NAME                DRIVER              SCOPE
b6abde186140        bridge              bridge              local
ab62333fad89        host                host                local
fb59f5172100        none                null                local
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker network inspect bridge
[
  {
    "Name": "bridge",
    "Id": "b6abde18614063a2b81ce4bbb95ab400a597f59c6ff85a9a6a4f354de1949a9c",
    "Created": "2021-06-14T21:03:36.848472662+08:00",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": null,
      "Config": [
        {
          "Subnet": "172.17.0.0/16"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
    "Containers": {},
    "Options": {
      "com.docker.network.bridge.default_bridge": "true",
      "com.docker.network.bridge.enable_icc": "true",
      "com.docker.network.bridge.enable_ip_masquerade": "true",
      "com.docker.network.bridge.host_binding_ipv4": "0.0.0.0",
      "com.docker.network.bridge.name": "docker0",
      "com.docker.network.driver.mtu": "1500"
    },
    "Labels": {}
  }
]
```

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astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker network inspect bridge
[
  {
    "Id": "b6abde18614063a2b81ce4bbb95ab400a597f59c6ff85a9a6a4f354de1949a9c",
    "Created": "2021-06-14T21:03:36.848472662+08:00",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": null,
      "Config": [
        {
          "Subnet": "172.17.0.0/16"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
    "Containers": {
      "e56c8c7631e5f8fef95de9ddffe9899debdbb3c329fd49d9c8d89cca902498ff": {
        "Name": "dummy",
        "EndpointID": "1c0f09bf0defec0f0ad8d7498e4ea64f9a269691c5efceeff6436c630d6397de",
        "MacAddress": "02:42:ac:11:00:02",
        "IPv4Address": "172.17.0.2/16",
        "IPv6Address": ""
      }
    },
    "Options": {
      "com.docker.network.bridge.default_bridge": "true",
      "com.docker.network.bridge.enable_icc": "true",
      "com.docker.network.bridge.enable_ip_masquerade": "true",
      "com.docker.network.bridge.host_binding_ipv4": "0.0.0.0",
      "com.docker.network.bridge.name": "docker0",
      "com.docker.network.driver.mtu": "1500"
    },
    "Labels": {}
  }
]
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astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$
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astor@REAPER: ~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker run --rm -d -e PING_TARGET=172.17.0.2 --name pinger allforas
tor/ping:1.0
5015beab82042c5391e0b6d699c75b5ece3e579bd72f3ff4702b7cc58ef60645
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker ps
CONTAINER ID   IMAGE                COMMAND                  CREATED        STATUS        PORTS        NAMES
5015beab8204   allforastor/ping:1.0 "sh -c 'ping $PING_T..." 10 seconds ago Up 9 seconds        pinger
e56c8c7631e5   allforastor/ping:1.0 "sh -c 'ping $PING_T..." 2 minutes ago  Up 2 minutes        dummy
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker logs pinger
PING 172.17.0.2 (172.17.0.2) 56(84) bytes of data.
64 bytes from 172.17.0.2: icmp_seq=1 ttl=64 time=0.143 ms
64 bytes from 172.17.0.2: icmp_seq=2 ttl=64 time=0.150 ms
64 bytes from 172.17.0.2: icmp_seq=3 ttl=64 time=0.106 ms
64 bytes from 172.17.0.2: icmp_seq=4 ttl=64 time=0.141 ms
64 bytes from 172.17.0.2: icmp_seq=5 ttl=64 time=0.131 ms
64 bytes from 172.17.0.2: icmp_seq=6 ttl=64 time=0.132 ms
64 bytes from 172.17.0.2: icmp_seq=7 ttl=64 time=0.122 ms
64 bytes from 172.17.0.2: icmp_seq=8 ttl=64 time=0.107 ms
64 bytes from 172.17.0.2: icmp_seq=9 ttl=64 time=0.129 ms
64 bytes from 172.17.0.2: icmp_seq=10 ttl=64 time=0.112 ms
64 bytes from 172.17.0.2: icmp_seq=11 ttl=64 time=0.133 ms
64 bytes from 172.17.0.2: icmp_seq=12 ttl=64 time=0.133 ms
64 bytes from 172.17.0.2: icmp_seq=13 ttl=64 time=0.142 ms
64 bytes from 172.17.0.2: icmp_seq=14 ttl=64 time=0.150 ms
64 bytes from 172.17.0.2: icmp_seq=15 ttl=64 time=0.130 ms
64 bytes from 172.17.0.2: icmp_seq=16 ttl=64 time=0.112 ms
64 bytes from 172.17.0.2: icmp_seq=17 ttl=64 time=0.110 ms
64 bytes from 172.17.0.2: icmp_seq=18 ttl=64 time=0.097 ms
64 bytes from 172.17.0.2: icmp_seq=19 ttl=64 time=0.129 ms
64 bytes from 172.17.0.2: icmp_seq=20 ttl=64 time=0.100 ms
64 bytes from 172.17.0.2: icmp_seq=21 ttl=64 time=0.132 ms
64 bytes from 172.17.0.2: icmp_seq=22 ttl=64 time=0.112 ms
64 bytes from 172.17.0.2: icmp_seq=23 ttl=64 time=0.110 ms
64 bytes from 172.17.0.2: icmp_seq=24 ttl=64 time=0.133 ms
64 bytes from 172.17.0.2: icmp_seq=25 ttl=64 time=0.132 ms
64 bytes from 172.17.0.2: icmp_seq=26 ttl=64 time=0.157 ms
64 bytes from 172.17.0.2: icmp_seq=27 ttl=64 time=0.130 ms
64 bytes from 172.17.0.2: icmp_seq=28 ttl=64 time=0.134 ms
64 bytes from 172.17.0.2: icmp_seq=29 ttl=64 time=0.104 ms
64 bytes from 172.17.0.2: icmp_seq=30 ttl=64 time=0.129 ms
64 bytes from 172.17.0.2: icmp_seq=31 ttl=64 time=0.135 ms
64 bytes from 172.17.0.2: icmp_seq=32 ttl=64 time=0.105 ms
64 bytes from 172.17.0.2: icmp_seq=33 ttl=64 time=0.112 ms

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astor@REAPER: ~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker run --rm -d -e PING_TARGET=dummy --name pinger allforastor/p
ing:1.0
1b1b472fa8ef5c5b76bfc423c73d378cf6a012ecad9c26c22b8b003c79e12cbe
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker ps
CONTAINER ID   IMAGE                COMMAND                  CREATED        STATUS        PORTS        NAMES
e56c8c7631e5   allforastor/ping:1.0 "sh -c 'ping $PING_T..." 6 minutes ago  Up 6 minutes        dummy
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker stop dummy
dummy
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker network create skynet
2ee6c956494b7f796bf70ef46ef575582f3fc85e9a5c5f727b88670dab8224ec
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker network ls
NETWORK ID     NAME      DRIVER    SCOPE
b6abde186140   bridge   bridge    local
ab62333fad89   host     host      local
fb59f5172100   none     null      local
2ee6c956494b   skynet   bridge    local
astor@REAPER:~/Documents/EEE/CoE 197S/ME8 Containerization_and_Docker/6-networking$ sudo docker network inspect skynet
[
  {
    "Name": "skynet",
    "Id": "2ee6c956494b7f796bf70ef46ef575582f3fc85e9a5c5f727b88670dab8224ec",
    "Created": "2021-06-15T01:57:25.528382126+08:00",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": {},
      "Config": [
        {
          "Subnet": "172.18.0.0/16",
          "Gateway": "172.18.0.1"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
  }
]

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astor@REAPER: ~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking
{
  "Driver": "default",
  "Options": {},
  "Config": [
    {
      "Subnet": "172.18.0.0/16",
      "Gateway": "172.18.0.1"
    }
  ],
  "Internal": false,
  "Attachable": false,
  "Ingress": false,
  "ConfigFrom": {
    "Network": ""
  },
  "ConfigOnly": false,
  "Containers": {},
  "Options": {},
  "Labels": {}
}
]
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker run --rm -d --network skynet --name dummy allforaster/ping:1.0
21ecba09dae1413ca9259ecfae0993e136eb8807e2cbc4a353943ad248f0ecc4
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker run --rm -d --network skynet -e PING_TARGET=dummy --name pinger allforaster/ping:1.0
2497c02135daa66de9c75ae1b5bfe4303f4686f47e01468e57c2a2e73f399ae8
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker logs pinger
PING dummy (172.18.0.2) 56(84) bytes of data.
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=1 ttl=64 time=0.191 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=2 ttl=64 time=0.095 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=3 ttl=64 time=0.140 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=4 ttl=64 time=0.120 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=5 ttl=64 time=0.107 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=6 ttl=64 time=0.144 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=7 ttl=64 time=0.143 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=8 ttl=64 time=0.144 ms
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker stop pinger
pinger
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker stop dummy
dummy
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ |
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astor@REAPER: ~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker run --rm -d --name widgetdb --network skynet -p 5432 postgres
46c2e94fbc2fa3e0b058b8759157180497f2eeb030c2317cb35b3dd378ea611c
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker run --rm -d --name gadgetdb --network skynet -p 5432 postgres
30c1b80c3e41a2edc28963586f7aec054f842d0440ee46a29ab79957051c7601
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker exec -it widgetdb /db/bash
Error: No such container: widgetdb
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker stop widgetdb gadgetdb
Error response from daemon: No such container: widgetdb
Error response from daemon: No such container: gadgetdb
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker run --rm -d --name widgetdb --network skynet -p 5432:5432 postgres
4c0c37d092d1595b85f859dfa56662513534bff4ec968c5a1614ca61d4ad039b
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ psql -U postgres -h localhost
Command 'psql' not found, but can be installed with:
sudo apt install postgresql-client-common
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker stop widgetdb
Error response from daemon: No such container: widgetdb
astor@REAPER:~/Documents/EEE/CoE 197S/ME8_Containerization_and_Docker/6-networking$ sudo docker network inspect skynet
[
  {
    "Name": "skynet",
    "Id": "17163e061c14c75254ab1a747560022b0b2b136bb63030abd548a48c8296ff",
    "Created": "2021-06-15T02:25:26.741616261+08:00",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": {},
      "Config": [
        {
          "Subnet": "172.19.0.0/16",
          "Gateway": "172.19.0.1"
        }
      ]
    }
  }
]
```